



The Waterloo Car Park, Cirencester

ENVIRONMENTAL STATEMENT: NON-TECHNICAL SUMMARY

April 2020
IN6285.008

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Photographs contained within this Non-Technical Summary are property of TEP and are included to help illustrate the site and its surroundings, including the existing character and built form of the local area. This has informed the design development in order to ensure an appropriate response to the site and its setting. Photographs have been taken from within the site boundaries or from publically accessible land.



1.0 Introduction



1.0 Introduction

1.1 Introduction

This Environmental Statement Non-Technical Summary (NTS) accompanies an application by Cotswold District Council (CDC) for planning permission for the construction of a five-storey decked car park (the 'Proposed Development') on the site of the existing Waterloo Car Park in Cirencester ('the Site').

The Local Planning Authority, CDC, determined in November 2018 (Ref: 18/03953/SCR) that the Proposed Development represents Environmental Impact Assessment (EIA) Development for which an Environment Statement (ES) is required under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations).

The application seeks consent for the construction of decked car parking to increase the parking capacity of the Site, comprising four decks (ground floor, plus four decks). The proposals comprise the following:

- 639 parking spaces; 586 standard, 35 disabled, 8 parent and child, and 10 electric vehicle parking.
- A five storey structure (ground plus four decks) with a fully enclosed roof.
- Access via Waterloo at the rear of the site (existing access).
- Egress via the Waterloo at the front of the site (existing egress).

The Proposed Development would bring about a number of potential significant benefits which includes addressing the identified parking shortage across Cirencester Town Centre.

A plan to show the location of the Site is included in Figure 1.1 and boundary of the Site is included in Figure 3.1

The Environmental Statement reports the findings of the EIA process that has been undertaken to inform the determination of the planning application. The ES identifies and evaluates the likely significant environmental effects (whether beneficial or adverse) that may occur as a result of the Proposed Development. Where appropriate, it identifies measures to avoid, reduce and compensate for predicted significant adverse effects on the environment and maximise the potential beneficial effects.

Technical assessments have been undertaken in accordance with best practice guidelines published by relevant professional bodies.

The technical reports assessed within the ES cover the following topic areas:

- *Archaeology and Historic Environment;*
- *Town and Visual Assessment;*
- *Noise and Vibration;*
- *Air Quality;*
- *Traffic and Transport;*
- *Flooding and Drainage; and*
- *Land Contamination.*

This document is a Non-Technical Summary of the findings of the ES presented in non-technical language.

1.2 Document Structure

Chapter 2 provides a summary of the EIA approach undertaken.

Chapter 3 provides description of the Application Site and the Proposed Development.

Chapter 4 considers the main alternatives of the Proposed Development.

Chapter 5 provides a summary of the potential environmental impacts and proposed mitigation measures where relevant.

Chapter 6 provides information on the availability of this NTS and the ES.

1.0 Introduction

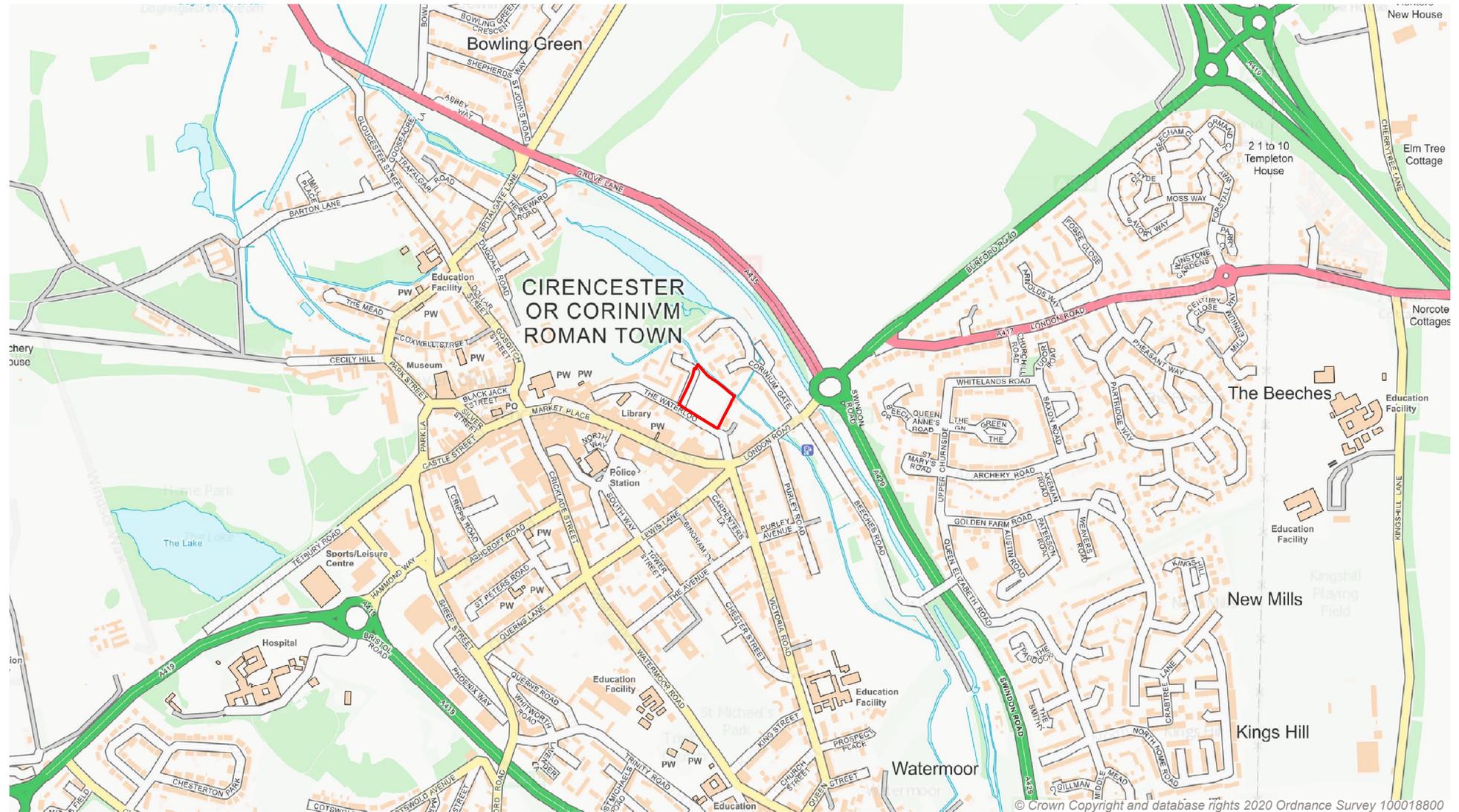


Figure 1.1 Site Location Plan

2.0 Approach to EIA



2.0 Approach to EIA

2.1 Screening

An Environmental Impact Assessment Screening Request was submitted to CDC in October 2018, in accordance with Regulation 6 of EIA Regulations to seek clarification from CDC on whether EIA would be required. The Proposed Development was concluded to be Schedule 2 development due to meeting sensitive area criteria as a Scheduled Monument and the total floor space across the multi-storesys exceeds 1ha.

The Screening Opinion was received in November 2018 and stated the following:

"...having considered the criteria stated within Schedule 3 of the above Regulations, the Local Planning Authority is of the opinion that the impact of the proposal IS therefore considered to be EIA development requiring the submission of an Environmental Statement".

2.2 Scoping

Scoping is not a mandatory requirement of the EIA Regulations, but is seen as good practice. The purpose of scoping is to ensure that environmental studies undertaken during the preparation of the ES provide all the relevant information on the likely significant environmental effects of the project and the potentially significant impacts are 'scoped in' for consideration.

A Scoping Report was prepared in accordance with the guidelines set out in Regulation 15 of the 2017 EIA Regulations to seek the opinion of CDC regarding the proposed approach for the environmental assessment of the Proposed Development.

The Scoping Report for the Proposed Development was submitted to CDC in November 2018. It provided information about the Proposed Development, summarised the potential significant environmental effects and set out the scope of assessment proposed.

CDC consulted the following statutory consultees:

- *Historic England;*
- *Environment Agency;*
- *Natural England;*
- *Local Members;*
- *Gloucestershire County Council Highways Development Management; and*
- *Gloucestershire County Council Local Lead Flood Authority.*

Within the Scoping Report topic chapters, identified effects, were assessed as to whether they were likely to be significant, or not. Issues which have been assessed as unlikely to give rise to significant environmental effects have been 'scoped out' from the EIA, in accordance with Schedule 4 of the EIA regulations.

On 8th February 2019, CDC provided a Scoping Opinion in response to the Scoping. CDC's response, along with scoping responses from consultees, included commentary on a number of matters which have been addressed throughout the ES.

Topics scoped into the EIA include:

- *Archaeology and Historic Environment;*
- *Town and Visual Assessment;*
- *Noise and Vibration;*
- *Air Quality;*
- *Traffic and Transport*
- *Flooding and Drainage; and*
- *Land Contamination.*

2.3 Significance of Environmental Impacts

The purpose of the ES is to identify and evaluate the environmental effects associated with the proposed development. These effects are then assessed based on the predicted magnitude of each effect (following mitigation) and the associated sensitivity of the receiving environment. This determines the significance of their impact.

There is no statutory definition of significance. In this ES the following descriptive terms are used to aid the reader in understanding the level of impact, and these are accepted as good practice.

- *High;*
- *Moderate;*
- *Minor;*
- *Negligible.*

2.4 Mitigation of Environmental Impacts

The development of mitigation measures is an integral part of EIA. Mitigation measures seek to avoid, reduce or compensate adverse effects and reduce the magnitude of potential impacts. These may include design changes, alteration of proposed methods, or other activities in addition to the core activities.

The level of effect significance is often used to determine the use and level of mitigation measures. Where a potential impact is assessed as 'moderate' or 'major' this is considered 'significant' in EIA terms, so as far as practicable, mitigation measures should be identified that reduces the potential magnitude or significance of effect.

In each technical chapter, the specialists undertaking the EIA have identified appropriate mitigation measures based on their assessment of potential significant impacts.

3.0 Scheme Description



3.0 Scheme Description

3.1 The Site

The Site comprises the existing Waterloo Car Park which is roughly square in shape and accommodates 233 standard spaces and 2 disabled bays with no provision for motorcycle and bicycle parking. The Site is 0.77 hectares in size and lies on the eastern side of Cirencester town centre in Gloucestershire, to the north of The Waterloo road.

The existing car park is tarmacked and the topography is generally level at approximately 110m Above Ordnance Datum. There are scattered trees throughout the Site.

The Site is bound by the River Churn and associated mature vegetation to the north. Beyond the River Churn to the north is a twentieth century housing development along Corinium Gate, comprising semi-detached properties.

To the east, two residential properties lie adjacent to the Site, separated from the eastern site boundary by a 2m limestone wall. Directly south of the Site is The Waterloo Road, the road from which Site access is obtained. Beyond the southern footway of The Waterloo lies a mix of residential and commercial properties as well as service areas and private car parks. There is also a recently constructed apartment block on the former Woolmarket car park to the south of The Waterloo. There are four-storey residential flats to the west of the Site. The Site boundaries currently comprise a mixture of low and high limestone walls and natural vegetation.

The car park is accessible from the A429 Ring Road via London Road, avoiding the need for traffic to be routed through the centre. Access to the Site is obtained in the north west corner of the Site, adjacent to the residential properties which lie to the west of the Site. Egress, in the form of an exit-only route is in the south east corner of the Site directly onto The Waterloo. Left and right movements are segregated by a central reservation.

Pedestrian access to and from existing the car park is via a number of access points from the town centre. Access is via steps; wheelchair users and prams need to use the vehicular access and egress points, therefore pedestrian permeability is an area for improvement.

The majority of the Site lies within Flood Zone 2 with the nearby River Churn to the north-east being in Zone 3.

The Site is archaeologically sensitive since it is located in Cirencester's Roman town. The Site lies within that part of the Roman town, Corinium, which is designated a Scheduled Monument in recognition of the national importance of the remains (Scheduled Monument No. GC 361). Four heritage assets within the scheduling indicate Roman occupation, including carved Roman stones, Roman clay roof tiles, stone wall foundations found near the Waterloo car park and Roman features including walls and floor layers.



Figure 3.1 Site Boundary

3.0 Scheme Description

3.2 The Proposed Development

Scale and Layout

The Proposed Development comprises a five storey structure (ground floor plus four decked levels) with a fully enclosed roof. In total there will be 639 car parking spaces over the five levels. In summary, the proposals will consist of:

- 586 car parking spaces;
- 35 disabled bays;
- 8 parent and child bays;
- 10 electric vehicle charging points; and
- Cycle storage with shower facilities.

The distribution of all of the parking spaces is detailed in the table below.

Floor	Non-disabled	Disabled	Parent and Child	Electric Vehicle	Total
L00	80	28	04	-	112
L01	106	07	04	10	127
L02	132	-	-	-	132
L03	132	-	-	-	132
L04	136	-	-	-	136
Total	586	35	8	10	639

Each level of the car park has three aisles of parking spaces with a one-way system to increase the circulation of each level. Vehicular ramps to each level are provided in the centre of the car park with a two-way ramp for those travelling to both lower and upper levels.

There are three core lobbies providing pedestrian access to each of level of the car park, excluding the roof. The Core 1 Primary Lobby is located to the south west of the car park and comprises

a stairwell, two elevators, cycle store with showers and toilets which are all publically accessible. The cycle store and toilets are located on the ground floor with separate access points. Alongside this is a switch room, office, cleaner’s cupboard and maintenance corridor, also located on the ground floor only. The Core 2 and Core 3 lobbies located in the north western corner and north eastern corner respectively comprise a pedestrian stairwell to all levels of the car park. The Core 3 lobby is an escape-only core.

The disabled parking bays and parent and child bays have been provided on the ground level and first level adjacent to the Core 1 Lobby with elevators to provide easy access to those with limited mobility and those who may have prams.

The roof level comprises a photovoltaic area of circa 2,960m² and maintenance walkway. This level is not publically accessible.

The overall scale of the car park is as follows:

- Width - 72.8m
- Depth - 61m
- Height - 18.9m
- Height of Core 2 - 21.7m

Appearance

The upper levels will be wrapped in woven metal panels using strips of mill finish marine grade and powder coated aluminium sheeting weaving in and out of an aluminium frame, creating a 3 dimensional panel. The eastern and western façades will be more closed with additional fire protection panels fixed to the façade from within the car park. The fire proof panels will be not be visible from outside of the building.

The lower level and pedestrian entrances will be constructed from Cotswold Stone filled gabions. Cotswold stone filled Gabion cladding is used throughout the south west of England and will ensure that the car park is in keeping with its surroundings, especially where the Proposed Development faces the historic core of Cirencester.

A green living wall system is proposed on the southern and eastern façades in the south eastern corner of the building.

Access

A two-lane vehicular access point will provide into the site from the north west off The Waterloo, adjacent to the residential flats west of the site. A two-lane vehicle egress point with a two way turning junction is proposed to the south east corner of the site.

Separate access and egress points, at these locations, minimise the impact of potential traffic build up at the junction with London Road.

Pedestrian connections are provided via the existing footpath along The Waterloo providing safe access to the Core 1 and Core 2 lobbies in the south western and north western corners of the car park. A rear access path is proposed in the north eastern corner of the Site to provide pedestrian access to the Core 3 Lobby.

3.0 Scheme Description



Figure 3.2 Primary Vehicular Approach

4.0 Alternatives



4.0 Alternatives

4.1 Alternative Locations

Paragraph 2, Part I of Schedule 4 of the EIA Regulations requires the Applicant to provide details of the main alternatives considered.

A Stage 1 Feasibility Study was carried out by TEP in 2016 to consider the potential for decked parking on eight car parks across Cirencester. The report regarded The Waterloo Car Park as the preferred site to promote decked car parking. The study stated the following about The Waterloo Car Park:

“The car park is a well-used facility, with good all round vehicular access. Pedestrian access could be improved and these improvements would be anticipated as part of any development proposals.”

The site’s size and shape lends itself to decked car parking, with an additional level of decked parking likely to achieve an increase in capacity of some 80%. It is supported both in adopted and emerging planning policy, although careful consideration of design and its integration into surrounding uses would be needed.”

Four of the car parks were considered suitable for decked parking including The Waterloo, The Forum, Brewery and Abbey Grounds. The remaining car parks were ruled out for the reasons outlined below.

- *Old Station Car Park - Physical restrictions were identified on the site as a result of the Listed Building, so once ramps and circulation space had been calculated, the gains in car parking provision were deemed unlikely to justify the construction costs. Gains in parking provision would likely be minor.*
- *Sheep Street Car Park – Consent to demolish the air raid shelter and front section of the Memorial Hospital to allow car parking may be difficult to secure unless a robust business case can be provided. Without their demolition the site could not accommodate the required infrastructure and circulation space required for a decked car park.*

- *The Leisure Centre Car Park – The majority of the use of this car park is associated with the Leisure Centre and it is located some distance from the town centre. The size and shape of the car park does not lend itself to decking once ramps and circulation space have been taken into consideration.*
- *Beeches Road Car Park - The site is relatively remote though is a well-used facility. The car park has a large number of environmental constraints and the elongated shape does not lend itself to decked car parking.*

Although the size and shape of the site make expansion of this car park a possibility, access to the site is through a residential area, which poses issues for increasing capacity at the site. In addition, numerous trees within the site and along the boundary are covered by a Tree Preservation Order.

The Brewery Car Park and The Forum Car Park were ranked third and second respectively. Both of the sites are allocated under Policy S1 of the Cotswold District Local Plan for retail-led mixed used development, suggesting that car parking is not the long term land use proposed for these sites.

4.2 Alternative Approaches

Alongside the consideration of alternative sites, alternative approaches have also been considered including a new car park, improvements to public transport, a park and ride facility and the ‘do nothing’ alternative.

A New Car Park

Rather than increasing capacity within existing town centre car parks, the option to create additional car park capacity at a new site has been considered.

Given the fabric of the historic town centre and the need for the car park to be within suitable walking distance of the town centre, a suitable site has not been identified despite numerous attempts.

Public Transport

A Transport Interchange has previously been proposed to join up the currently fragmented public transport service that serves the town as a whole. However, due to space being a premium, the only sites identified as appropriate are the town's existing car parks such as the Forum or Old Station car parks. Development at these sites would reduce the already stretched car parking capacity, not resolving the existing car parking issue in Cirencester. It is suggested that improvements to public transport be sought alongside increased car park capacity.

Park and Ride

The Stage 1 Feasibility Report outlines the issues in establishing a financially viable Park and Ride Scheme due to the subsidy required from the Local Highway Authority as well as issues in making Park and Ride attractive to users.

Overall, it is the view of Gloucestershire County Council Public Transport Unit that Cirencester is too small to justify and sustain a dedicated Park and Ride operation.

Do Nothing

The Stage 1 Feasibility Report stated that if no action is taken, a lack of available car parking could result in an increase in traffic generation with drivers looking for somewhere to park, creating more congestion and pollution in the town centre. Safety concerns were also raised in the narrow streets for pedestrians and cyclists, jeopardising wider sustainable transport initiatives.

The lack of additional parking on the financial viability and stability of businesses in Cirencester, was also raised as an area of concern.

4.0 Alternatives

4.3 Site Layout

The site layout has been revised during the preparation of the application.

Development Options November 2016

Option 1- Maximise Site Capacity

This option proposed to maximise the development potential of the Site for car parking, proposing a maximum of 824 spaces could be provided on the site, representing a 71% increase in overall parking.

Option 2- Provide Commercial Frontage along the Waterloo

This layout option demonstrated a design which could provide a mix of commercial and residential accommodation up to three-storeys in height. Two separate structures were proposed to accommodate turning facilities for delivery vehicles and a service yard to the rear of the commercial properties. This limited the overall parking capacity to a maximum of 676 spaces.

Option 3- Provide a landscape buffer

This option proposed a landscape buffer around the edge of the car park to help integrate the car park into its surroundings, conscious to the potential impact of a modern structure in the historic centre of Cirencester. This option would provide a total capacity of 676 spaces, representing an increase of 67% in parking provision.

Of the above three options, both elements of Option 1 and Option 3 were proposed to be taken forward to respond to under-capacity of car parking in Cirencester whilst integrating the car park into the surrounding townscape.

Development Options March 2019

Option 1

- Ground Floor plus three storey multi-storey car park
- 574 total parking spaces

Option 2

- Ground Floor plus five storey multi-storey car park
- 487 total parking spaces

Option 3

- Ground floor plus three storey multi-storey car park
- 648 total parking spaces

Sketch Masterplan April 2019

Following a Design Meeting on 3rd April 2019 the following numbers were fixed, which progressed to the next stage:

- 639 parking spaces; 586 standard, 35 disabled, 8 parent and child, and 10 electric vehicle parking.
- A five storey structure (ground plus four decks) with a fully enclosed roof.
- Access via Waterloo at the rear of the site (existing access).
- Egress via the Waterloo at the front of the site (existing egress).

Façade Competition April – September 2019

A design competition was formulated to find an architect to design the façade of the car park. Stripe had designed the core structure but the external 'wrap' was to be designed by a different architect.

The shortlisted competition designs comprised;

- Hare and mosaic;
- Wooden weave; and
- Aluminium on stone.

Final Masterplan Winter 2019/2020

The final project scheme assessed in this ES is the preferred option balancing technical feasibility, economic viability and deliverability and is expected to cause the least disturbance to the environment and receptors relative to the other options that have been considered.

The final scheme was subject to an assessment of viability versus parking need. The outcome was the project requirement to provide no less than 600 car parking spaces. This took into account the current parking provision (233 + disabled), the town centre shortfall (347) plus a small amount (approximately 10%) to ensure future proofing.

Cirencester HERITAGE

Brought to you by Cirencester Town Council

Roman Cirencester



Cirencester, or Corinium Dobunorum as it was named by the Romans, was the second largest town in Roman Britain. As such, the town was fortified by a wall with four entrance gates. The 'Verulamium' Gate was just a stone's throw away to your left at the junction of Corinium Gate and London Road.

The Town Wall

The Roman wall in front of you is the only exposed part of Corinium's town wall. The wall would have stood approximately 6m (20 feet) high with a walkway and parapet on top. Stone towers were built at intervals along the bank, whilst platforms (bastions) projecting from the face of the wall completed the very formidable defences.

Three main Roman roads converged on Corinium. These were the Fosse Way, Ermine Street and Akeman Street. The Verulamium Gate was used by travellers approaching the town along Akeman Street having journeyed from London (Londinium) and St. Albans (Verulamium).



Artists Impression of how Verulamium Gate might have looked

Excavated Finds



1. A large fragment of a stone statue of Mercury was found at the Bath Gate, perhaps once adorning this entrance to the town. Mercury is the patron god of commerce, communication and travellers and appears to have been very popular with the people of Roman Corinium.



2. Excavation of the Verulamium Gate exposed grooves in the road resulting from heavy use by horse and cart traffic entering and leaving the town.

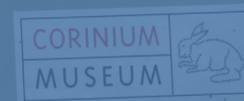


3. Roman cemeteries were situated outside of the walled town. When Bath Gate cemetery was excavated, archaeologists found a bone comb buried in a grave, just one of the many objects presented to assist the dead in the afterlife.



Want to know more?

Why not download the Corinium Museum's 'Romans' App? 'Romans' brings the sites and objects of Roman Cirencester together in a way that has never been possible before. The app includes an enhanced Museum Tour, Town Tour and a Learning Zone, perfect for a visitor to Cirencester, or anyone interested in Roman history.



www.coriniummuseum.org

Thank you to the Corinium Museum and Liverpool Archaeology for permission to use artwork and images.

www.cirenhistory.org.uk



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5.0 Environmental Assessment

5.1 Archaeology and Historic Environment

The Archaeology and Historic Environment Assessment undertaken by TEP presents findings of the assessment of potential impacts arising from the Proposed Development on archaeology and the historic environment.

There is one designated heritage asset within the Site comprising the Corinium Roman town Scheduled Monument. This asset has high evidential and associative and illustrative historical heritage, as demonstrated by the standing remains, and number of archaeological events recorded, and the archaeological potential for further buried remains which is yet to be fully understood. As a Scheduled Monument, this asset holds very high heritage value.

There are 33 designated heritage assets within the wider ES study area comprising one Scheduled Monument, two Conservation Areas, and 30 Listed Buildings. There are eight non-designated heritage assets recorded by Gloucestershire Historic Environment Record within the 10m buffer study area, of which five lie within the proposed development area boundary.

Construction phase effects relate predominantly to physical effects on heritage assets within the Site. No physical effects on heritage assets are predicted during the operation phase, as any further ground disturbance would be within areas that have already been subject to archaeological mitigation during the construction phase. For the same reason, at decommissioning there would be no physical effects on archaeological heritage assets.

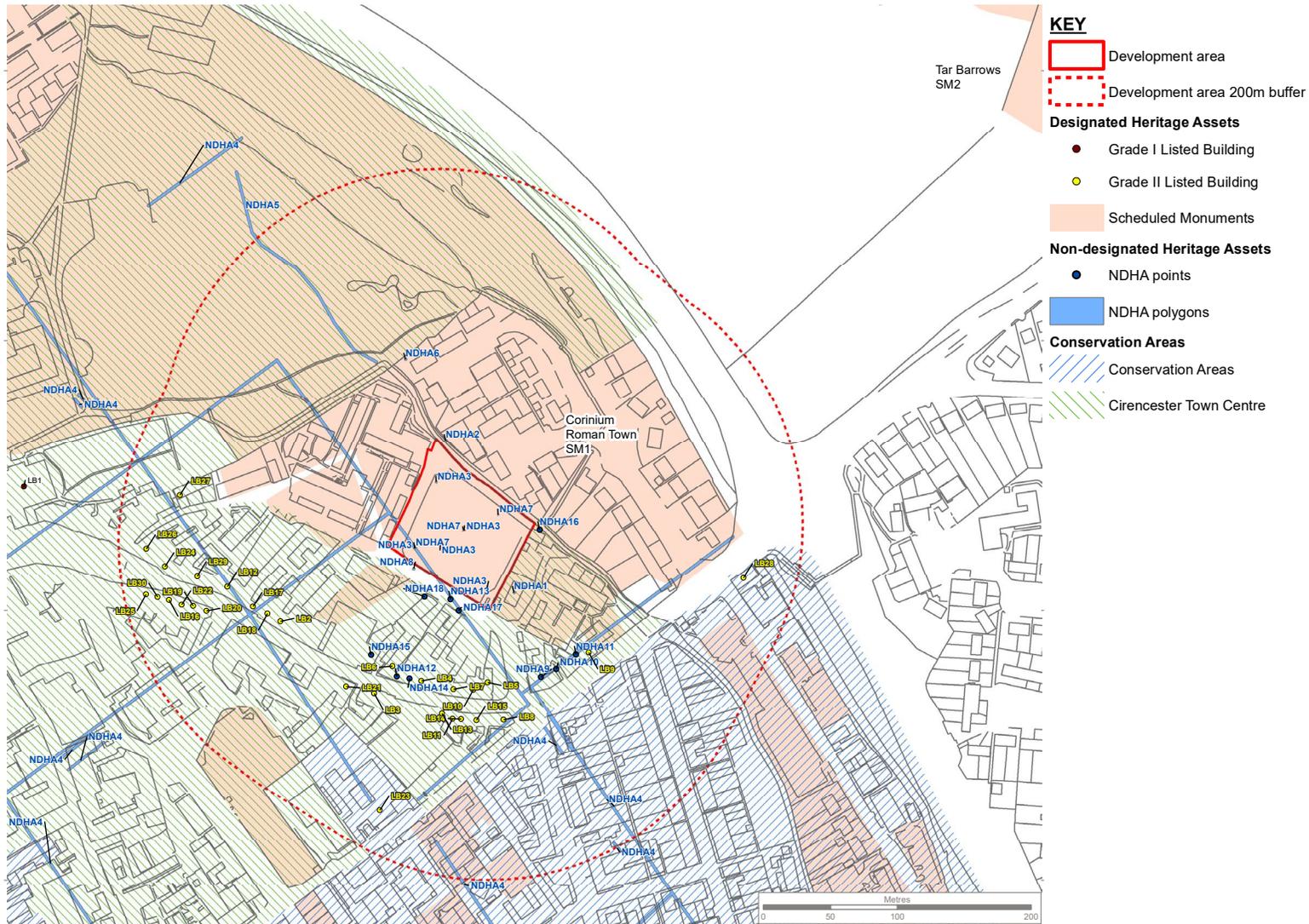
All of the predicted effects arising from the operational phase of the Proposed Development within the setting of heritage assets are equivalent to less than substantial harm in terms of the National Planning Policy Framework (NPPF). Minor adverse effects are considerably less than substantial.

The Site makes up approximately 0.77ha of Corinium Roman town, the scheduled area of which covers large areas of north-east, south and south-east Cirencester. The construction of the Proposed Development would result in partial loss to one element of this asset. The total area of the scheduled area is 48.9ha whilst the piling area is 763.82m². This equates to a loss of 0.15%. Therefore the predicted magnitude of impact to this asset based on a realistic worst case scenario, is moderate adverse. The significance of effect is therefore predicted to be moderate adverse, before mitigation.

A programme of archaeological works would advance understanding of the significance of the known, and any as yet unknown heritage assets that will be affected by the development, in a manner that is proportionate to their importance and impact. The archaeological works would provide an opportunity to deliver public interpretation of the Site and may contribute to our knowledge and understanding of the relationship between the Roman town and the River Churn, and the expansion of the street system, as well as the later Roman period and supposed abandonment of Roman settlements. Following mitigation, the magnitude of effect is predicted to be low and therefore, given that this asset has very high heritage significance, the residual significance of affect is minor adverse.

Taking into account embedded mitigation as part of the project design, and mitigation measures recommended within the ES, the overall residual impact of the Proposed Development is considered to result in a minor adverse permanent effect. This is not a significant effect in terms of the EIA Regulations and would result in less than substantial harm, therefore in accordance with paragraph 196 of the NPPF, should be weighed against the public benefits of the proposal.

5.0 Environmental Assessment



5.0 Environmental Assessment

5.2 Townscape and Visual Assessment

A Town and Visual Impact Assessment (TVIA) was carried out by TEP. The TVIA assesses the effects of the Proposed Development on townscape and on its character; on the character of the landscape in the wider area; and on views.

The townscape and landscape potentially affected by the Proposed Development is assessed as being of medium sensitivity to the change proposed.

The Proposed Development would result in a high adverse magnitude of effect and a substantial adverse significance of effect, on the townscape character of the Site and its immediate context. There would be some screening from the wider townscape by mature trees along the north-eastern edge of the Proposed Development and along the A435 Grove Lane; and by surrounding built-form including four storey residential blocks to the immediate northwest, and built-form on the north side of Dyer Street and Market Place.

The Proposed Development would be introduced into the setting of the Cirencester Town Centre Conservation Area (CA). The magnitude of effect on the Cirencester Town Centre CA would be medium adverse in a limited area, and the significance of effect on the medium sensitivity townscape, would be moderate adverse. The Proposed Development would result in a low adverse magnitude of effect, and a minor adverse significance of effect on the Cirencester Town Centre CA, as a whole.

Beyond the Site's immediate context, the significance of adverse effects on townscape and visual amenity, and adverse effects on the landscape to the northeast (within North Cirencester Special Landscape Area (SLA)) and to the west (within the Cotswolds AONB and Cirencester Park Registered Park and Garden), would be lower, due to less inter-visibility between the Proposed Development and the surrounding townscape and landscape.

Inter-visibility would be less due to dense built-form within the urban area, (including three storey buildings), combined with the generally flat topography across Cirencester; due to mature tree screening even in the winter months; and due to distance.

The Proposed Development would result in a low adverse magnitude of effect and a minor adverse significance of effect on the North Cirencester SLA, and on the Cirencester North Fringe Dipslope Landscape Character Area (LCA) (CLD2), covered by this SLA. The magnitude and significance of effect on the Cirencester North Fringe Dipslope LCA overall would be negligible.

There would be a negligible effect on the Cotswolds AONB and the South and Mid Cotswolds LCA 11A; and on the Cirencester Park RPG. The Proposed Development would also result in a negligible effect on National Character Area 107: The Cotswolds, as a whole.

The greatest adverse visual effect of high adverse magnitude is predicted in views of the Proposed Development from:

- *Flats to the immediate northwest of the Site;*
- *Residential and commercial properties on the south side of The Waterloo;*
- *Residential properties on the south-eastern edge of the Proposed Development;*
- *Properties on the southern edge of modern housing at Corinium Gate with open or filtered close views; and from*
- *The Waterloo.*

The Proposed Development would shorten views and new built-form would occupy a large proportion of the view. There would be a major alteration in the above views.

The significance of the visual effect in high and medium sensitivity views would be substantial adverse, on completion, and in the short and medium-term.

In the long-term, tree planting proposed as part of public realm improvements along The Waterloo would continue to provide low level filtering and screening in close views towards the Proposed Development experienced by local residents, pedestrians, cyclists, motorists and workers overlooking the Proposed Development. Tree planting along the south-eastern edge of the Proposed Development also would provide additional filtering and screening in views from residential properties east and southeast of the Proposed Development, accessed off The Waterloo and London Road. Given the nature of the Proposed Development, the significance of effect on views would remain as reported above, for the long-term.

5.0 Environmental Assessment

5.3 Noise and Vibration

A Noise and Vibration Impact Assessment was undertaken by Bureau Veritas in March 2020. This considers the sound levels at outdoor amenity areas and within habitable residential rooms due to future on-site and off-site noise sources and whether noise mitigation would be needed to protect amenity at the existing receptors.

During construction, the results indicate that vibration effects at the nearest property on Corinium Way (No. 23) and No. 33 The Waterloo may be short term, and of moderate to minor adverse significance, should vibration inducing activities be undertaken at the closest approach. The levels are not sufficiently high to cause damage to buildings but may cause complaint and residents will be warned in advance of any such activities.

To reduce the potential impact of noise and vibration levels generated by the construction phase of the development, at existing receptor locations in the immediate vicinity of the site, mitigation measures will be incorporated into the Construction Environmental Management Plan (CEMP).

During operation, the greatest noise change is predicted to be +2.1 dB (peak daytime period) at residential receptors to the north of the Development on Corinium Gate. This represents an effect of low magnitude on receptors of medium sensitivity, which would result in a permanent impact of minor adverse significance. At all other nearby dwellings, the change is less than 1dB and therefore there would be a permanent impact of negligible adverse significance.

The assessment indicates that the noise impacts associated with operation of the new car park development would be of minor adverse significance. Therefore no specific noise mitigation measures are proposed.

5.4 Air Quality

An Air Quality Assessment was undertaken by Bureau Veritas to assess the likely significant effects of the Proposed Development on air quality.

Following the construction dust assessment the Site is found, in relation to dust soiling to be medium risk for demolition, earthworks, construction and low risk for and trackout activities. In regards to human health impacts, there is a negligible risk for demolition and trackout and a low risk for earthworks, construction.

Providing effective mitigation measures are implemented, impacts from dust emissions during the construction phase would be not significant. Several mitigation measures are proposed during the construction phase in respect to;

- *Communications;*
- *Site management;*
- *Monitoring;*
- *Preparing and maintaining the Site;*
- *Operating vehicle/machinery and sustainable travel;*
- *Operations; and*
- *Waste managements.*

Predicted concentrations of Nitrogen Dioxide (NO₂) and Particulate Matter (PM₁₀) at receptor locations in relation to the Site operational phase are believed to be 'well below' the respective Air Quality Strategy (AQS) objective limits, with impacts being assessed as generally negligible. Therefore, mitigation measures associated with the site during the operation phase are not considered to be required.

NO₂ annual mean concentrations predicted at all receptors associated with the proposed development in all scenarios, are well below the annual mean AQS objective. Furthermore, in consideration in the determination of overall significance; in line

with Environmental Protection UK (EPUK) and the Institute of Air Quality Management (IAQM) guidance, the impact at 46 out of 49 receptors has been assessed as being "Negligible" with the impact at the remaining 3 receptors being "Slight". On this basis it is considered that the proposed development site is considered suitable for the proposed use.

Particulate Matter annual mean concentrations predicted at all receptors associated with the proposed development in all scenarios, are well below the annual mean AQS objective. Furthermore, in consideration in the determination of overall significance; in line with EPUK/IAQM guidance, the impact at all receptors has been assessed as being "Negligible". On this basis it is considered that the proposed development site is considered suitable for the proposed use.

5.0 Environmental Assessment

5.5 Traffic and Transport

Transport Assessment was undertaken by Atkins to assess the potential traffic and transport impacts and considers the likely significant effects of the Proposed Development on the environment in respect of traffic and transport.

The study area comprises The Waterloo, London Road, Victoria Road, Lewis Lane, Dyer Street and Market Place.

During construction, the significance of effects assessment demonstrates that the Proposed Development will have a negligible effect on the majority of the assessed road links. However, the assessment has established that during construction there are potentially significant effects on The Waterloo and London Road, relating to the increase in heavy duty vehicle traffic flow, which would be temporary in nature. It has been determined that there is unlikely to be any significant residual effects from the construction of the Proposed Development. A construction traffic management plan would ensure that any potential effects are mitigated during construction.

During operation, the significance of effects assessment demonstrates that the proposed development will have a negligible effect on all but one of the assessed road links. There are potentially moderate significant effects on The Waterloo relating to the increase in general traffic flow which has been assessed as moderate. It is considered that the provision of the mitigation will ensure that no significant residual environmental effects are experienced during operation of the Proposed Development.

The increase in traffic flow along The Waterloo across the day equates to 94 vehicles per hour, or between one and two vehicles a minute two-way; it is notable that this increase is on top of a low base flow and that traffic speeds are low on this road link. Nevertheless, the increase in flow could potentially increase the perception of severance, with pedestrians finding it more difficult to cross.

Consideration could be given to the provision of an uncontrolled pedestrian crossing, located on The Waterloo, to enable pedestrians to safely access Cirencester town centre from the site, which would be secured by condition as part of the planning process.

The review of historic collision data has not identified any safety concerns along The Waterloo, and the increase in traffic is not expected to change the nature of the road, whilst there is suitable visibility at the car park egress onto The Waterloo.

5.6 Flooding and Drainage

CampbellReith was appointed to assess the impact of the Proposed Development on drainage and flood risk and propose mitigation measures, where appropriate, to prevent, reduce or offset any significant adverse effects to the site.

Following the development of the Site, the impermeable area is not anticipated to increase, therefore the volume of surface water runoff and risk of surface water flooding is not expected to change. However, the increase in the number of cars accessing the site could cause an increase in the amount of hydrocarbons entering the surface water drainage network, which could have an adverse impact on the water quality of the River Churn.

The Site currently has a medium risk of fluvial flooding and low risk of surface water flooding in accordance with Environment Agency flood maps. The proposed development is considered to have a minor beneficial impact on the risk flooding from these sources through the implementation of the proposed drainage strategy, which will include the attenuation of surface water runoff.

The finished floor level of the proposed development is to be raised by either 600mm above the existing ground level, or 300mm above the modelled flood level, whichever is higher, in accordance with Standing Advice provided by the Environment Agency. Raising the ground will reduce the ingress of flood waters into the car park and reduce the risk of fluvial flooding to the development.

The Site is currently considered to have a low risk of groundwater flooding. Since there are no basement structures within the design of the proposed car park, the impact on groundwater flooding is regarded as negligible.

5.0 Environmental Assessment

The incorporation of a petrol interceptor upstream from the outfall for the surface water drainage network will have a minor beneficial impact on the water quality of the River Churn, as there is a reduced likelihood of contaminated water entering the watercourse during the operation of the site.

Overall the Proposed Development is not considered to have any significant adverse effects on the water environment so long as the appropriate mitigation measures are implemented.

5.7 Land Contamination

The scoping assessment submitted to the Local Authority in November 2018 scoped out land contamination due to the studies that had been undertaken on site and the conclusions that the risks posed by contamination at this site are generally low. The qualitative risk assessment (QRA) determined a varied level of risk associated with the proposed development.

Notwithstanding this, the Environment Agency and Local Authorities Contaminated Land Officer both requested that Land Contamination be included within the Environmental Statement, although they both acknowledged that the supporting information had not been read.

Site Investigations were carried out by Cotswold Geotech in 1998 and a desk study was undertaken by Curtin in 2017.

The risk to controlled waters (groundwater and surface waters) from sources of pollution within the Made Ground on and off site is assessed as Low/Moderate. The chronic health risk to site end users from on and off site soils with potential to generate ground gases via vertical and horizontal migration through the underlying deposits is assessed as Low/Moderate.

The QRA concluded by recommending that generic quantitative risk assessments (GQRA) were conducted to confirm the assessment of risk ascribed to each of the respective potential pollutant linkages (PPLs). It is recommended that the GQRA is conducted as part of a ground investigation in support of the engineering design of the proposed development

It should be noted that while the risks posed by contamination at this site are generally low the structure to be built on the site is likely to involve relatively high loadings. The focus of the ground investigation should therefore be on the geotechnical properties of the site.

In summary, the following recommendations are made:

- *Undertake an intrusive ground investigation;*
- *Undertake a GQRA as part of the ground investigation.*

6.0 Further Information



6.0 Further Information

6.1 Environmental Statement Availability

Copies of this ES will be made available for inspection at the following location:

Cotswold District Council
Trinity Road
Cirencester
Gloucestershire
GL7 1PX

Comments on the ES should be either sent to the above address or emailed to planning@cotswold.gov.uk

Further Copies of the Environmental Statement and Non-Technical Statement

Copies of the accompanying Non-Technical Summary (NTS) are available free of charge.

Hard copies of the ES can be purchased for a cost of £75 and electronic versions on CD are £5. For a copy of either the ES and NTS please contact TEP on the details below:

Address	Contact
The Environment Partnership The Genesis Centre Garrett Field Birchwood Warrington WA3 7BH	01925 844004 tep@tep.uk.com

The documents are also available to download at: <https://www.cotswold.gov.uk/planning-and-building/planning-permission/view-planning-applications/>



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